Testing Your Assumptions Assignment – Jozsef Ladanyi

Project position statement

For people living off a regular salary who would like to achieve financial independence within a set time frame, the FI-Tracker is a web-based Personal Finance Management application that helps tracking incomes, expenses and investments and even able to follow the user's progress on the way towards financial independence.

Personal Capital and alternative solutions are solely aiming the U.S. population and cannot be used outside the United States. Also, in Hungary there are no sophisticated, comprehensive solutions, only a couple of simple financial apps that can do no more than keep track of and categorize expenses.

Unlike these simple, local cost-tracker solutions, our product goes several steps further and makes the use of excel tables and manual data recording unnecessary by automating the tracking of inflow and outflow of money as well as giving a complete overview of the personal wealth / detailed financial status of the user: his/her net worth and the time by when he/she can reach financial independence – all in one place.

Core/Summary Value Hypothesis

There are financially conscious Hungarian adults (referred to as '**FCHA**' from now on) who struggle to follow their financial status – including but not limited to their regular spending. Currently they record their spending in simple cost-tracker applications and use custom-made, manually filled excel tables in order to have a complete overview of their personal wealth. If we provide an online finance analysis and management tool for them, they will visit and use the site on a regular basis to update and track their status which will improve their financial consciousness and shortens their journey towards financial independence.

Feature Experiment on Financial Independence Calculation Functionality

We have already built the basic application which is capable of collecting information on customer spending. We would like to find out whether it is feasible to continue with the development of the next layer of functionality, namely the Financial Independence calculator.

What assumption will this test?	If we provide controls for FCHA to set future investment and withdrawal parameters based on which the site calculates the date by when the user can be independent of his primary income (i.e. stop working) and displays a progress chart towards that goal, then they will use it and will be inspired to manage their spending and investments more efficiently to achieve that goal sooner.

How will we test it?	Wizard of Oz – We will setup a simple page where based on minimal parameters (average total monthly expense, average total monthly income, investment return rate) a simple calculation is made and the results (progress up to the target date and beyond) are displayed on a simple chart. A new tab will be created where the user can try out the new functionality with the basic controls.
What is/are the pivotal metric(s)?	0 day: users discover the feature and make the calculation by playing with the parameters, 30 day: regular visitors repeatedly use the new functionality to calculate their path to financial independence, 90 day: the feature is continuously used by site visitors.
What is the threshold for true (validated) vs. false (invalidated)?	0 day: • validated: >=60% of users make their first calculation when they visit the site the first time the new feature was added, • invalidated: <60% 30 day: • validated: >=70% of regular users do repeated calculations after 30 days of introduction of feature, • invalidated: <70% 90 day: • validated: >=50% of users do regular calculations with the new feature playing with the parameters, • invalidated: <50%.
What will you do next if the result is true? False?	If true/validated, we will then build the full-fledged version of the calculation engine for which parameters will be based on historical spending/income and spending trends of the user. This will move us toward our goal of providing a complete solution for FCHAs aiming for FI making their journey easier. If false/invalidated, we will need to rethink our value proposal and design new functionality for tracking personal wealth which will be considered valuable to customers and move us toward our goal of offering comprehensive help for FCHAs along their way towards FI.
How much time, money will it take to set up?	To set up the experiment it will take: - 24-40 hours of IT development by front-end Javascript developers (communication with back-end, chart setup, business logic),

	- 16-32 hours of IT development by back-end developers (data logic and tracking/logging), - 8-24 hours of design work by site builders (controls and chart design). *No direct expenses* are expected to occur (no changes to development stack and hosting environment is required).
Roughly, what will it take for each individual test?	Tests are run without human intervention as stats are automatically logged. Collecting test results will take: - 4-12 hours of work per round (for 0, 30 and 90 days) of reading and transforming logs by back-end developers. *No direct expenses* should occur.
Roughly, how long will it take for each test to run and produce definitive, actionable results?	- 0 day results will be collected in the first 30 days collecting data for customers entering the site the first time after the feature was introduced, - 30 day results will be collected between day 30-40 of the introduction of the new feature (given that the number of regular users are relatively low since this is a new site), - 90 day results will be collected between day 90-100 of the introduction of the new feature.